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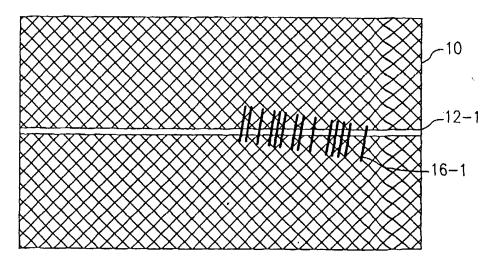
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[Continued on next page]

(54) Title: OPTICAL READER HAVING PARTIAL FRAME OPERATING MODE



(57) Abstract: The invention is an optical reader having a 2D image sensor that is configured to operate in a partial frame capture mode. In a partial frame operating mode, the reader clocks out and captures at least one partial frame of image data having image data corresponding to less than all of the pixels of an image sensor pixel array. In one embodiment, the reader operating in a partial frame operating mode captures image data corresponding to a linear pattern of pixels of the image sensor, reads the image data, attempts to decode for a decodable 1D symbol which may be represented in the image data, and captures a full frame of image data if the image data reading reveals a 2D symbol is likely to be present in a full field of view of the 2D image sensor.



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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06K7/10 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) IPC 7 G06K Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X WO 93 18478 A (NORAND CORP) 1,10,30, 16 September 1993 (1993-09-16) 33 page 5, line 32 - line 35 page 6, line 36 -page 7, line 20 χ US 5 710 417 A (HE DUANFENG ET AL) 33 20 January 1998 (1998-01-20) column 6, line 36 - line 45 Α US 5 984 186 A (TAFOYA BENNY R) 2-5 16 November 1999 (1999-11-16) 12-15 column 3, line 38 - line 52; figures 3,4 US 5 929 418 A (EHRHART MICHAEL A ET AL) Α 1 - 4527 July 1999 (1999-07-27) cited in the application figures 1-3,9 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the *A* document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or other means ments, such combination being obvious to a person skilled document published prior to the International filing date but later than the priority date claimed *&* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 11 July 2002 22/07/2002 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Heusler, N

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